Amendment to the Specification:

On page 3, please insert the following new paragraph as the last paragraph, after line 28:

FIG. 4 is a side-view of an alternative testing apparatus having a breakable glass tube, according to the invention.

On page 5, line 1, after "chemical substance", please insert ---23---.

On page 5, line 2, after "breakable glass tube", please insert ---21 as shown in FIG. 4 (wherein like reference numerals are used to indicate like elements)---.

material and storing a chemical substance in the container portion, such that upon operation of the bulb to draw air into the container portion, a detectable indicator gas is generated for presentation into the local environment.

In another aspect of the invention, a method of testing equipment in a local environment is provided. The testing method involves storing a chemical substance, reactive with air to produce an indicator gas, in a container formed substantially from a polymeric material and providing a polymeric squeeze bulb device in operative communication with the container and formed integrally, as one piece, therewith. A portion of the container tube is broken to provide an outlet, and them the squeeze bulb is operated to draw air past the chemical substance to produce a human detectable outward of the container and into the local environment. In the local environment, the indicator gas may be detected to determine the operability of the equipment in the local environment. For example, the indicator gas may be visually observable gas, such that a detecting step includes visually observing the behavior of the indicator gas in the local environment or observing the flow of the indicator gas in the local environment.

Other and further objects, features, and advantages of the present invention will be apparent from the following detailed description of a presently preferred embodiment(s) of the invention, given for the purpose of disclosure, and taken in conjunction with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side-view of a testing apparatus with a partial longitudinal section cut away, according to the present invention; and

FIG. 2 is a cross-sectional view of the testing apparatus in FIG. 1 taken along line AA.

FIG. 3 is a plan view with cut-out of a testing apparatus in accordance with another embodiment of the present invention.

FIG. 4 is a side-view of an alternative testing apparatus having a breakable glass tube, according to the invention.

container tube 14 (i.e. the plugging material and the chemical substance 23) are encapsulated in a breakable glass tube 21 as shown in FIG. 4 (wherein like reference numerals are used to indicate like elements). Such use of multiple materials allows one layer to provide certain advantageous properties (e.g., low permeability, inertness, non-reactive with the chemical, non-corrosive, good sealing properties, etc.) while the other layer provides other advantageous properties (e.g., high strength, tear resistance, durability).

The device 11 includes an elongated container tube 14 and a manual pump 13 formed integrally as one-piece with the tube 14. The pump 13 could be a manually squeezable bulb, a bellows-driven pump, or a syringe. As shown in FIG. 1, the pump is a manually squeezable bulb 13. The tube 14 and 13 are preferably molded to form a continuous, seamless one-piece structure. One end of the tube 14 is a sealed tip 21 that may be cut or broken off prior to operation. The sealed tip 21 is sealed in a number of ways including by heat sealing or installment of a rubber cap. A middle portion 17 of the tube 14 container or otherwise stores a chemical substance. Advantageously, the bulb 13 is formed continuously with the tube 14 at the end of the tube 14 opposite the sealed tip 21. It should be noted, however, that pump 13, although formed continuously or integrally with the tube 14, (e.g., through molding), may be constructed of a material different form the tube portion 14.

It should be noted that the phrase "formed integrally as one piece" refers to a structure of two or more portions which are formed together from one or more material sources, such that the end product (as used in the testing operation) is a permanently joined single structure. As a result, the inventive device is easier to package, assemble (no assembly required), and to operate (no assembly required). Additionally, by using a polymeric material, the durability and effectiveness of the testing device are enhanced (among other things).

The embodiment illustrated in FIG. 1 is approximately 5" long. The bulb 13 is approximately 1½" long and is preferably about 5/8" in diameter. The tube 14 is preferably smaller in diameter (i.e., about ¼). As compared to prior art bulbs, the inventive bulb 13 is less rigid and more resilient. The minimum wait time between pumps is shorter and thus, the bulb may be squeezed more frequently than prior art rubber bulbs.

For a respirator fit testing device, the middle of the container portion 17 includes a first plug 15, preferably comprising cotton, and a second plug disposed on either end of a preferably granular mixture of silicate gel packing (small blades), and liquid SnCl4 (tin